DOCUMENT RESUME

BD 126 380

CG 010 666

AUTHOR TITLE

Parr, Gerald D.: Lundquist, Gerald .

The Effects of Modeling and Behavior Rehearsal in

Assertive Training with Adolescents.

PUB DATE

NOTE

25p.; Paper presented at the Annual Meeting of the American Educational Research Association (San

Francisco, California, April 19-23, 1976)

EDRS PRICE

DESCRIPTORS

MF-\$0.83 HC-\$1.67 Plus Postage.

*Adolescents; *Behavior Change; Counseling:

*Counseling Effectiveness; Research Projects; Role

Theory: *Skill Development

IDENTIFIERS

*Assertive Training: *Modeling

ABSTRACT

The effects of modeling and rehearsal in counseling nonassertive adolescents were examined by randomly assigning subjects (Ss) to one of five treatment groups: modeling plus rehearsal (MR), modeling only (M), rehearsal only (R), placebo control (P), or delayed-treatment control (C). Significant (p < .05) main effects for treatment were found on a self-report assertiveness questionnaire (AQ) and specific problem inventory (SPI). Newman-Keuls comparisons indicated that Post AQ scores of βR Ss were significantly (p < .05) more assertive than P or C Post AQ scores and that the MR, M, and R Post SPI ratings were significantly (P < .05) less severe than ratings in the P treatment group. (Author)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort * to obtain the best copy available. Nevertheless, items of marginal * reproducibility are often encountered and this affects the quality * of the microfiche and hardcopy reproductions ERIC makes available * via the ERIC Document Reproduction Service (EDRS). EDRS is not * responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

GERALD D. PARR
COLLEGE OF EDUCATION
TEXAS TECH UNIVERSITY
LUBBOCK, TEXAS

GERALD LUNDQUIST SCHOOL OF EDUCATION UNIVERSITY OF COLORADO-DENVER DENVER, COLORADO

:: C. G.

THE EFFECTS OF MODELING AND BEHAVIOR REHEARSAL IN ASSERTIVE TRAINING WITH ADOLESCENTS

> U S OEPARTMENT OF HEALTH EQUCATION & WELFARE NATIONAL INSTITUTE OF EQUCATION

Wir 4.57/ Sugar

THIS DOCUMENT HAS BEEN REPRO-OUCEO EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN-ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-SENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY Gerald D. Parr College of Education Texas Tech University Lubbock, Texas

Gerald Lundquist School of Education University of Colorado-Denver Denver, Colorado

THE EFFECTS OF MODELING AND BEHAVIOR REHEARSAL
'IN ASSERTIVE TRAINING
WITH ADOLESCENTS1

The conceptual basis of assertive training originated with Salter's (1949) ideas regarding excitation versus inhibition, and Wolpe's (1958) theory of reciprocal inhibition. Recently, Alberti and Emmoms (1970) have discussed assertiveness as "...the behavior which enables a person to act in his own best interests, or stand up for himself without anxiety,. to express his rights without denying the rights of others."

A review of case studies on assertive training reveals that it has been used for a wide variety of problems: uncontrollable masturbation (Newman, 1969), exploitation (Geisinger, 1969), submissiveness and aggressiveness (Wolpe, 1970; Macpherson, 1972), homosexuality (Edwards, 1972), marital conflicts (Fensterheim, 1970), social anxiety (Bloomfield, 1973), and changing sex roles of women (Jakubowski-Spector, 1973). Assertive training has generally focused on helping clients acquire new skills of self-assertion, and it has been frequently used in conjunction with other approaches, e.g., reciprocal inhibition where the focus is on the extinction of maladaptive responses

The authors wish to express their appreciation to Dr. Kenneth Hopkins and Miss Marilyn Averill of the Laboratory of Educational Research at the University of Colorado for their assistance with the design and analysis of this study.

such as anxiety.

Several experimental studies (Hedquist and Weinhold, 1972; Rathus, 1972; Zeeger, 1973) have reported that the self-report scores of college students who had participated in assertive training groups were significantly higher than the scores of students who had been randomly assigned to placebo or control groups. Using simulations to measure the nonverbal components of assertiveness, Eisler, Herson, and Miller (1973) found that assertive training with psychiatric patients was more effective than placebo or delayed treatments. The treatment strategy in these studies generally consisted of varying combinations of modeling, behavior rehearsal, coaching, reinforcement, and contracting.

Several studies have focused on specific components of assertive training. A study by Young, Rimm, and Kennedy (1973) used nonassertive female college students to compare the effectiveness of modeling alone, modeling plus reinforcement, no treatment, and placebo treatment. Results of a behavior role-playing test of assertiveness revealed that both modeling groups were superior to the placebo and control groups but that the two modeling groups did not differ significantly. Significant treatment effects were also found on a self-report inventory, the Lawrence Assertive Inventory, but a Scheffe' comparison of the two modeling groups failed to reveal significant differences between modeling plus reinforcement and modeling alone.

3

McFall has reported a series of laboratory analogue studies that are especially pertinent to the question of which components of assertive training contribute to treatment effects. The first study (McFall & Marston, 1970) explored the effectiveness of behavior rehearsal and feedback in assertive counseling. The behavior rehearsal procedure was semi-automated and standardized. Ss practiced making overt assertive responses to tape recorded stimulus situations. These practice responses were tape recorded and some Ss listened to the replays of their responses. Forty-two nonassertive Ss were randomly assigned to one of the following groups: behavior rehearsal with performance feedback; b) behavior rehearsal without feedback; c) placebo insight therapy; and d) no-treatment control. Treatment groups received four one-hour treatment sessions over a three-week period. were tested by responding to a set of tape recorded stimulus situations; an audiotape of their responses was rated on a five-point scale. The behavior role-playing revealed that: the behavior rehearsal conditions did not differ significantly from one another; b) the two control conditions did not di/ffer significantly; and c) the combined treatment groups showed significantly (p $\mbox{\ensuremath{\mbox{$\checkmark$}}}$.05) greater improvement than the combined control groups. Parallel results were found on the Wolpe-Lazarus Assertive Scale.

In a second experiment, McFall and Lillesand (1971) studied overt and covert behavior rehearsal with symbolic verbal modeling

and coaching. Again, training consisted of a standardized semiautomated, laboratory analogue of assertive training. The dependent variable was refusal of unreasonable requests. Thirty-three introductory psychology students were selected to serve as Ss on the basis of low scores on the Conflict Resolution Inventory. Ss were randomly assigned to one of three groups: a) overt rehearsal with modeling and coaching; covert rehearsal with modeling and coaching; or c) an assessment-placebo control. All Ss were seen individually for two experimental sessions, one week apart. Overt Ss rehearsed aloud whereas the covert Ss were told to imagine their assertive responses. Overt Ss heard a recorded replay of their practice responses while covert Ss spent an equivalent period of time merely reflecting upon their imagined responses. The Conflict Resolution test yielded a global score and three specific scores. The global score did not show significant treatment effects. Comparison of the combined overt and covert treatment groups with the control groups on the specific factors showed that the behavioral rehearsal groups improved significantly more than the control group. No significant difference was found between the two rehearsal groups. Ratings of the Ss performance on a behavior role-playing test revealed a significant overall treatment effect (p<.001). Orthogonal comparisons revealed: that the combined rehearsal groups improved significantly more than the control group, which remained essentailly unchanged (p (001), and b) that the covert group improved more

than the overt group (p < .025). Results of an Extended Interaction test also showed significant overall differences due to treatment; however, no difference was found between rehearsal groups. Finally, a followup telephone call failed to show significant differences among groups of significant treatment effects.

The latest study of the McFall series (McFall & Twentyman, 1973) is especially pertinent to the present study. The study consisted of four experiments. As with the previous studies, each of the experiments consisted of a semi-automated, well-structured analogue mode of treatment. All experiments used refusal of unreasonable requests as the dependent variable.

In the first experiment, 72 nonassertive Ss were randomly assigned to one of the following groups: a) rehearsal, modeling, and coaching; b) rehearsal and modeling; c) rehearsal and coaching; d) rehearsal only; e) modeling and coaching; and f) assessment control. All Ss met twice for about twenty minutes. Results of the experiment revealed that: a) the global score of the Conflict Resolution Inventory did not differ significantly across groups; b) the assertion factor of the Conflict Resolution Inventory showed highly significant treatment effects (p(.01); moreover; it was determined that the components of rehearsal and coaching contributed to improvement while modeling accounted for practically none of the treatment effect; c) significant group differences were evident from the scores on a behavior role-playing test with rehearsal and coaching

again contributing to the treatment effects while modeling did not, and d) and Extended Interaction Test and a telephone followup yielded no significant differences.

The second experiment attempted to determine if the findings of the first experiment with respect to modeling would be replicated. Also, an attempt was made to validate the measures used in the first experiment. Ninety nonassertive college students were randomly assigned to one of nine experimental groups. One experimental factor was type of treatment received: a) covert rehearsal plus modeling plus coaching; b) covert rehearsal plus coaching; and c) covert The rehearsal group /was considered as a minimal-treatment control group to provide a baseline for the effects of the rehearsa/1 component, which was common to all three treatment group's. Training groups received coathing as well as rehearsa. The modeling component was also assessed. The second/experimental factor was the time-lapse between end of treatment and the followup test. The three 11 days; b) (18 days; and c) time-lag intervals were: a) 25 days. Analyses of the pretreatment to posttreatment change scores on both the Conflict Resolution Inventory and the Behavior Role-playing Test revealed significant effects due to treatment methods, but none due to the time lag intervals or the treatment times the time-lag interaction. Orthogonal comparisons revealed that the rehearsal only group performed significantly less assertively on both the Conflict Resolution Inventory and the Behavior Role-playing Test. Comparison of the rehearsal plus modeling plus coaching group and the rehearsal plus coaching group failed to reveal significant differences, again indicating that modeling added little or nothing to the effects of rehearsal and coaching. The study found highly significant differences between the nonassertive Ss and "superassertive" Ss on both the Conflict Resolution Inventory and the Behavior Role-playing Test.

Still unconvinced that modeling was not a contributing factor in assertive training, a third experiment was conducted where highly abrupt or assertive models were compared with tactful or moderately assertive models. Also, the experiment examined three different conditions of rehearsal: a) covert-covert; b) overt-overt; and c) covert-overt. A significant overall effect was found, but it was due to differences between treatment versus control almost entirely. A telephone follow-up failed to show any significant group differences. The results, again, suggested that modeling did not add to treatment effects, irrespective of the type of model. No difference was found between overt and covert rehearsal.

The present study was undertaken partly as a consequence of the provocative and unexpected findings reported by McFall and Twentyman (1973). Unlike the McFall, et al., studies, however, the present study was conducted in a natural counseling setting with adolescent rather than adult subjects.

Subjects

Subjects (Ss) for the study were randomly selected from a pool of students who scored in the lower third of scores on a self-report questionnaire of assertiveness. The questionnaire, the Junior High Assertiveness Questionnarie (AQ), developed by the experimenter, consisted of 25 Likert-type items and was administered to 300 eighth and ninth grade students from a junior high school in Colorado. Thirty boys and thirty girls. from the lower third of scores on the AQ agreed to participate in the study and were randomly assigned to a counselor and a treatment group. The average z-score for participants was -1.37. Analysis of variance of AQ scores for grade, sex, and participation revealed that study participants were significantly (p<.0001) less assertive than nonparticipants, and that eighth graders were significantly (p <.04) more assertive than ninth graders. Males and females did not differ significantly (p<.22). Overall, the students from the junior high were from upper midder class families. Their performance on the Henmon-Nelson Mental Ability Test showed that about 47 percent of all students had IQ's of 109 or higher.

Counselors

Four of the six counselors in the study were practicum students in a master's degree program. One was a full-time counselor with a master's degree and the other was a teacher.

The average age of the counselors was 39.3 years. On an average, the counselors had taken 21.5 semester hours of course work in counseling related subjects prior to the study. Three of the counselors were male and three were female.

Experimental Treatments

Each counselor was randomly assigned one girl and one boy for each of the following treatment groups: modeling and rehearsal (MR), modeling only (M), rehearsal only (R), a placebo script counseling (Pto and a delayed-treatment control group (c). Counselors met with $\underline{S}s'$ for about 48 minutes in the MR, M, and R treatment groups once a week for a total of six weeks. Ss in the P group were given an opportunity to correspond with their assigned counselor once a week. MP treatment consisted of the counselor modeling assertive behavior for $\underline{S}s$, who were then given an opportunity to rehearse making assertive responses. The M treatment group consisted of counselors modeling assertive behavior without subsequent rehearsal by $\underline{S}s$. In the R treatment, $\underline{S}s$ rehearsed making assertive responses, but the counselor did not offer to model assertive behavior. Both standardized situations developed by the experimenter and specific situations provided by each \underline{S} were used during treatment sessions. $\underline{S}s$ in the P treatment group were encouraged to discuss assertiveness in their letters, and counselors made suggestions which included seeking out peer models and practice. Counselors and $\underline{S}s$ did not make face-to-face contact.

Counselors were given a two-hour training session on treatment procedures prior to the study. They used Your Perfect Right by Alberti and Emmons (1970) as a general guide.
The experimenter listened to audiotapes from each counselor and monitored the progress of each counselor over the six week period.

Measures

The following measures were used: a self-report questionnaire (AQ), a teacher rating of assertiveness (TR), a peer rating of assertiveness (PR), and behavior role-playing best (RT), and a specific problem inventory (SPI). The AQ, consisted of 25 Likert-type items which described specific situations wherein assertive behavior was appropriate. Cronback's alpha reliability coefficient for the scale was .769, and the testretest reliability over a seven week period was .641. and PR forms were identical to the AQ except that personal pronouns were changed to read he or she rather than I or you. internal reliability coefficients were: .950 for the TR, and .854 for the PR. The interrater reliability coefficient for the pair of teacher raters was .590, and .179 for the pair of peer raters. Both teacher and peer raters were selected by Ss. The RT consisted of ten stimulus situations which were presented to Ss by audiotape. The S's responses to each situation were audiotaped and rated on a Likert-type scale by two independent

11

judges. The internal consistency reliability coefficient for the RT was .795. The interrater reliability coefficient of the two judges was .8213. The SPI consisted of three specific assertiveness problems of each client, who rated the severity of each problem on a Likert-type scale. The AQ and SPI were administered pre and post treatment. The TR, PR, and RT were administered post treatment only. The Pre and Post AQ and the RT were administered by the experimenter while the Pre and Post SPI were administered by counselors. Correlations across measures were low and nonsignificant, the only exception was the TR correlated .616 with Pre AQ and .438 with Post AQ.

Design and Analysis

A 5 X 3 X 2 X 2 factorial design based upon a mixed modelwas used. The factors were: treatment, counselor (nested with sex), sex of counselor, and sex of client. AQ, TR, PR, and RT were analyzed by analysis of covariance (ANCOYA) with the Pre AQ serving as the covariate. A null hypothesis was adopted for all analyses of main effests and interactive effects. The following hypotheses were stated prior to multiple comparisons:

1.) That clients assigned to MR treatment would score significantly more assertive than other treatment groups on AQ, TR,

PR, and RT and would rate their Post specific problems as less severe than all other groups on the SPI; 2.) That clients in the M, R, and P treatment groups would score significantly higher on AQ, TR, PR, and RT and lower on SPI than clients from the

C group; and 3.) That M and R groups scores would be significantly more assertive on AQ, TR, PR, and RT and less severe on SPI than scores from the P group. The null was adopted for the M and R group comparisons.

RESULTS

For AQ

Analysis of variance of Pre AQ scores for the five treatment groups prior to treatment revealed that there were no significant differences between treatment groups (F = .6289, P < .6289). ANCOVA for Post AQ scores yielded significant differences between treatment groups (F = 3.96, P < .05) and between counselors nested within counselor sex (F = 2.7577, P < .05). Results of ANCOVA for Post AQ scores appears in Table #1. Results of Newman-Keuls comparisons revealed that the

Insert Table # 1

modeling plus rehearsal treatment group Post AQ scores were significantly higher than scores of the control group (q = 4.060, p<.05, 1-tailed q) and significantly higher than the scores of the script counseling placebo group (q = 3.758, p<.05, 1-tailed q). All other comparisons failed to reach to .05 level of significance. Since counselors were nested within

TABLE # 1

ANALYSIS OF COVARIANCE FOR POST ASSERTIVENESS QUESTIONNAIRE COVARYING ON PRE ASSERTIVENESS QUESTIONNAIRE

	-		T'	<u>-</u>	-
-			<u> </u>	<u> </u>	
Source of		Mean	Error		•
Variation	d.F.	Squares	·Term	F	
Treatment (T)	4	0.3271	0.0826	3.9600*	
Sex of	. <u>.</u>			•	
Client (G)	1	0.1545	0.0872	1.7718	
Sex of	ž	•	•		
Counselor (S)	<u>l</u>	0.6531	0.3455	1.8903	
Counselor C(S) (nested within So	ex) 4	0.3047	0 1105	0 75774	
(HEBEER WICHIN 5	<u> </u>	<u> </u>	0.1105	2.7577*	
°G ·	4	0.0849	0.1473	-0.5764	. '
es '	4	0.1325	0.0826	1.6041	
CT (S)	16	0.1081	0.1105	0.9787	_
SS	1	0.0148	0.0872	0.1697	
rgs	4	0.0936	0.1473	0.6354	
CG (S)	4	0.0911	0.1386	0.6570	
•	4				

^{*}Significant at .05 level

counselor sex, multiple comparisons of counselors were not made.

For TR, PR, and RT

The only main or interactive effects to reach significance on TR, PR, or RT were: 1.) ANCOVA of TR scores revealed a significant interaction of treatment by sex of client by sex of counselor (F = 3.307, p<.05); 2.) ANCOVA of RT scores showed a significant counselor nested within counselor sex effect (F = 3.220, p<.05). Graphs of the interactive effect found on TR failed to yield a commission or meaningful pattern. Multiple comparisons were not used for the significant counselor nested within counselor sex effect for the same reason given for the effect found on AQ. Results of the ANCOVAs for TR, PR, and RT appear in Tables #2, #3, and #4.

Insert Tables #2, #3, and #4

For SPI

The analysis of the Post SPI was made by using Pre SPI scores as a covariate. The delayed-treatment control Ss were not included as a factor. The assigned values for the Likert-scale of the SPI were: 5 = extreme concern; 4 = strong concern; 3 = moderate condern; 2 = somewhat a concern; and 1 = hardly a concern. Results of the ANCOVA of Pre SPI scores revealed that there were no significant differences (F = .1637,*

TABLE # 2

ANALYSIS OF COVARIANCE FOR TEACHER RATINGS COVARYING ON PRE ASSERTIVENESS QUESTIONNAIRE

				<u> </u>
Source of Variation	d.F.	Mean Squares	Error Term	
Treatment (T)	4	0.2807	0.1951	. F
Sex of		0.2007	0.1951	1.4387
Client (G)	1	1.7258	0.2468	6.9927
Sex of Counselor (S)	1	0.4640	0.4722	0.0001
Counselor C(S) (Nested within Sex)	4	0.0984	0.1004	0.9797
rg	4	0.3579	0.1437	2.4906
rs	4	0.5324	0.1951	2.7288
CT(S)	16	0.1560	0.1004	1.5538
Ss	7	0.1873/	0.2468	0.7589
rgs	4	0.4752	0.1437	3.3069*
CG (S)	4	0.1011	0.1177	

^{*}Significant at .05 level

TABLE # 3

ANALYSIS OF COVARIANCE FOR PEER RATINGS COVARYING ON PRE ASSERTIVENESS QUESTIONNAIRE

` <u></u>			•	
		,	N .	
Source of Variation	d.F.	Mean Squares	Error Term	F
Treatment (T)	4	0.0676	0.1421	0.4757
Sex of Client (G)	11	0.0632	0.0896	0.7054
Sex of Counselor (S)	11	0.2821	0.0373	7.5630
Counselor C (S) (Nested within S	ex) 4	0.3825	0.2528	1.5128
<u>TG</u>	4	0.0545	0.1095	0.4977
TS ¹	4	0.0480	0.1421	0.3378
CT (S)		0.1946	0.2528	0.7698
GS	_ f _ 1	0.0524	0.0896	0.5848
TGS	4	0.1902	0.1095	1.7370
CG (S)	4	0.2391	0.2488	0.9610

TABLE # 4

ANALYSIS OF COVARIANCE FOR BEHAVIOR ROLE-PLAYING TEST COVARYING ON PRE ASSERTIVENESS QUESTIONNAIRE

		, , ,		
Source of Variation	d.F.	Mean Square	Error Term	· F
Treatment (T)	4	0.4369	0.2443	1.7884
Sex of Client (G)	<u> </u>	0.1291	0.2006	0.1291
Sex of Counselor (S)	1	0.4756	0.6411	0.7418
Counselor C(S) (Nested within Sex)	4	0.6334	0.1967	3.2197*
TG	4	0.1865	0.1848	1.0092
TS	4	0.1339	0.2443	0.5481
CT (S).	16 ,	0.2448	0.1967	1.2445
gs Y	1	0.0002	0.2006	0.0010
TGS	4	0.3002	0.1848	1.6245
CG (S)	4	0.1999	0.2384	0.8386
				

^{*}Significant at .05 level

p .9203) between treatment groups. ANCOVA of the Post SPI yielded a significant difference (F = 5.4944, p < .05) for the treatment factor. All other sources of variation failed to reach significance (p < .05). Results of ANCOVA for the Post SPI appears in Table #5.

Insert Table #5

The Newman-Keuls method of multiple comparisons indicated that the Post SPI scores in the MR, M and R treatment groups were significantly less (p<0.05, l-tailed q) than the Post SPI scores in the P treatment group. All other comparisons failed to reach significance (p<0.05).

Summary of Results

Results of the study lead to a rejection of the following null hypotheses: a) that there is no difference between treatment groups on the Post AQ and the Post SPI; b) that there is no difference between counselors nested within counselor sex on the Post AQ and the Post SPI; and c) that there is no interaction of treatment by sex of client by sex of counselor on the TR.

The Newman-Keuls method of multiple comparisons of treatment groups on the Post AQ revealed that modeling plus rehearsal clients scored significantly more assertive (p $\langle .05 \rangle$) than clients of the control group and more assertive (p $\langle .05 \rangle$) than clients of the script counseling group. The Newman-Keuls

TABLE # 5

ANALYSIS OF COVARIANCE FOR POST SPECIFIC PROBLEM INVENTORY COVARYING ON THE PRE SPECIFIC PROBLEM INVENTORY

	О	-		
Source of Variation	d.F.	Mean Square	Error Term	F
Treatment (T)	3	3.2307	0.5880	5.4944*
Sex of Client (G)	1	0:1007	0.4448	0.2264
Sex of Counselor (S)	1	1.4271	. 1.9087	0.7477
Counselor C (S) (Nested within Sex)	4	1.2471	0.4544	2.7446
TO'	3 .	0.5697	0.4744	1.2009
TS	3	0.6641	0.5880	1.1294
CT (S)	16	0.6016	0.4544	1.3241
GS	1	0.0852	0.4448	0.1915
TGS	3	0.1280	0.4744	0.2698
CG (S)	4.	0.4103	0.7430	0.5522
	1		<u> </u>	,

^{*}Significant at .05 level

15

comparison of treatment groups on the Post SPI scores revealed that clients in the modeling plus rehearsal, the modeling only, and the rehearsal only treatment groups rated their pretreatment specific problems as less severe (p < .05) than clients of the script counseling group.

DISCUSSION AND, IMPLICATIONS

The findings in the present study paralleled the findings of several other studies. Like the Rathus (1972) and the Zeiger (1973) studies, Ss in the assertive counseling treatment groups rated themselves significantly more assertive than Ss in the control and placebo treatment groups. Zeiger found significant effects on a Cohort's Questionnaire using a relaxed alpha level (p<.15) while the peer and teacher ratings in the present study did not yield significant main effects due to treatment at a more conservative alpha level (p<.05). The main and interactive effects due to counselor and client sex failed to reach significance in the present study, but there appears to be no other study on assertive counseling to which these results can be compared.

Unlike the McFall, et al study (1973), the present study failed to reveal significant treatment effects on the behavior role-playing test. The McFall studies focused on refusal of unreasonable requests only while the present study concerned several facets of assertiveness, and this difference in the specificity of the dependent variable may account for

the present study's failure to detect differences on the roleplaying test. The trend of the findings in the present study

tended to support McFall's discovery that rehearsal contributes
more to treatment than modeling, but the results of this study
generally failed to support this hypothesis at the .05 level

of significance. It is the writers' view that McFall's thesis
that modeling loes not contribute to treatment effects in
assertive counseling may not apply to naturalistic counseling
settings.

REFERENCES

- Alberti, R. (1970) Your Perfect Right: A Guide to Assertive Behavior: Impact, San Luis Obispo.
- Bloomfield, H. (1973) "Assertive training in an out-patient group of Chronic schizophrenics: A preliminary report."

 Behavior Therapy, 4, 2, 277-281
- Edwards, N. (1972) "Assertive training in a case of homosexual pedophilia." Journal of Behavior Therapy and Experimental Psychiatry, 3, 55-63.
- Eisler, R., Herson, M., and Hiller, P. (1973) "Effects of modeling on components of assertive behavior." Journal of Behavior Therapy and Experimental Psychiatry, 4, 1,
- Fensterheim, H. (1970) "Assertive methods and marital problems."

 In Rubin, Fensterheim, and Henderson (Eds.), Advances in

 Behavior Therapy. Academic Press, New York.
- Geisinger, D. (1969). "Controlling sexual and interpersonal anxieties." In J. Krumboltz and C. Thoresen (Eds.);

 Behavioral Counseling: Cases and Techniques. Holt,
 Rinehart, and Winston, New York.
- Hedquist, F., and Weinhold, B. (1970) "Behavioral group counseling with socially anxious and unassertive college students." Journal of Counseling Psychology, 17, 3, 237-242.
- Jakubowski-Spector, P. (1973) "Facilitating the growth of women through assertive training." The Counseling Psychologist, 4, 1, 75-86.
- Macpherson, E: (1972) "Selective operant conditioning and deconditioning of assertive models of behavior."

 Journal of Behavior Therapy and experimental Psychiatry, 3, 99-102.
- McFall, R. and Lillesand, D. (1971) "Behavior rehearsal with modeling and coaching in assertive training." Journal of Abnormal Psychology, 77, 3, 313-323.
- McFall, R. and Marston, A. (1970) "An experimental investigation of behavior rehearsal in assertive training."

 Journal of Abnormal Psychology, 76, 2, 295-303.
- McFall, R. and Twentyman, C. (1973) "Four experiments on the

- relative contribution of rehearsal, modeling, and coaching to assertive training." <u>Journal of Abnormal Psychology</u>, 81, 3, 199-218.
- Newman, D. (1969) "Using Assertive Training." In J. Krumboltz and C. Thoresen (Eds.), Behavioral Counseling: Cases and Techniques. Holt, Rinehart, and Winston, New York.
- Rathus, S. (1972) "An experimental investigation of assertive training in a group setting." <u>Journal of Behavior Therapy and Experimental Psychiatry</u>, 32, 565-574.
- Salter, A. (1949) Conditional Reflex Therapy. Creative Age Press, New York.
- Wolpe, J. (1958) Psychotherapy by Reciprocal Inhibition. Stanford University Press, Stanford.
- Wolpe, J. (1970) "The instigation of Assertive behavior: transcripts from two cases." Journal of Behavior Therapy and Experimental Psychiatry, 1, 145-151.
- Young, E., Rimm, D., and Kennedy, T. (1973) "An experimental investigation of modeling and verbal reinforcement in the modification of assertive behaviors." Behavior Research and Therapy, 11, 3, 317-319.
- Zeiger, J. (1973) "The effects of video-tapped modeling and behavior rehersal through group training on assertive behavior." Dissertation, University of Colorado, Boulder.